

**CITY OF LODI
INFORMAL INFORMATIONAL MEETING
"SHIRTSLEEVE" SESSION
CARNEGIE FORUM, 305 WEST PINE STREET
TUESDAY, OCTOBER 9, 2001**

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, October 9, 2001 commencing at 7:00 a.m.

A. ROLL CALL

Present: Council Members – Hitchcock (arrived at 7:02 a.m.), Howard, Land, Pennino and Mayor Nakanishi

Absent: Council Members – None

Also Present: Deputy City Manager Keeter, City Attorney Hays, and Deputy City Clerk Perrin

B. CITY COUNCIL CALENDAR UPDATE

Deputy City Clerk Perrin reviewed the weekly calendar (filed).

Announcements

Deputy City Manager Keeter introduced the Chamber of Commerce Leadership Lodi participants that were in attendance.

C. TOPIC(S)

C-1 "Urban Forest Issues – Maintenance Management of Public Trees and 'Heritage' Tree Policy"

Maintenance Management of Public Trees

Public Works Director Prima explained that the Department has changed its outlook on how it deals with trees and now goes out of its way to maintain and protect them. There are a number of trees in the parks that are managed by Parks and Recreation, with the remainder of those on public property and rights-of-way handled by Public Works. This software could be used to manage both.

Ralph Nevill, Manager of Urban Forestry with ACRT, Inc., provided a PowerPoint presentation (filed) and explained that an Urban Forest Management Plan is a comprehensive master plan that leads to a healthier, more efficiently maintained urban forest, and is based on tree inventory data. It provides detailed tree information and yearly maintenance and long-term management recommendations, including tree species profiles, species selection criteria, planting program development and tree protection, and future trends for the urban forest.

Reasons for an Urban Forest Management Plan include:

- knowledge of the resource, which would include determining the number, locations, and conditions of trees;
- safety of the trees, by planning annual safety inspections and routine safety pruning and determining hazard trees;
- management of trees to allow for routine service maintenance and service requests that would also interact more efficiently with other departments; and
- planning for future development, tree replacement, and budgeting.

Components of the plan include tree inventory, tree inventory software, data analysis of inventory results, tree species profiles, planting and maintenance recommendations, tree protection, and future trends for the urban forest. A tree inventory encompasses:

- numbers and locations (via address or a mapped location);
- type of planting (street, median, parking lot, public land, park, etc.);
- street type (major, minor, residential, scenic);
- species, age, and size (diameter, height, canopy spread, etc.);
- condition, health, and structural (risk) assessment;
- site conditions (dimensions of planting strip, pit, median, turf);
- constraints (street lights, overhead utility lines, traffic signs, commercial signage);
- infrastructure damage rating; and
- other data, such as nuisance and pest problems, allergy potential, historic or cultural significance, Heritage or protected status; etc.

An Urban Forest Management Plan provides a proactive management tool that assesses the present condition of the urban forest; provides cost projections; assists with the budget process; projects future changes and needs; and monitors change over time. Once the inventory is complete, the information can also provide the value of the City's trees, which can then be used for insurance purposes should a tree suffer damages from a vehicle or by other means. The plan would allow scheduling and tracking of work completed and prioritize removals, tree planting, and other maintenance. It would also detect hazards and manage liability that could ultimately reduce the numbers of trip-and-fall accidents caused by tree roots damaging sidewalks.

Most tree inventories consist of two parts: tree location and tree attribute information. The Global Positioning System (GPS) is used to map the location of trees. ACRT uses Tree Manager for Windows to collect the tree information, and the data is compatible with the City's existing maps and data systems. Maps and databases make managing the tree inventory easier as it allows for quick visual surveys. The databases allow for searches on tree attributes. Staff would quickly see where patterns emerge in the City and see where the hazard trees are, as well as those needing pruning. It would be much more difficult to review this information via tables of data versus searching the database using certain criteria (e.g., trees with a particular diameter, location, etc.).

ACRT uses graduates and certified Arborists to collect the tree data. They are knowledgeable in how to assess the trees and use hand-held pen-based computers using Windows 98 and Tree Manager for Windows. Because the data is collected in a Windows environment, there is no problem with data conversion, nor the need for additional software. The foresters use special GPS receiving devices, which allow them to collect data three feet under the tree to give accurate delineation. Tree Manager organizes tree inventory data and uses Windows point-and-click interface, allowing the user to view the entire urban forest on a tree-by-tree basis or by specific criteria. The software also enables staff to produce reports, history, service requests, and more.

Council Member Howard asked if an annual purchase of additional software upgrades would be necessary.

Mr. Nevill explained that upgrades are done periodically for any major changes in software, which can be purchased; however, if the City bought the optional maintenance agreement (approximately \$4,500), it would receive the updates at no extra cost. The agreement comes with hours of free assistance, and, without the agreement, the City could purchase the service on an hourly basis.

In reply to Council Member Hitchcock, Mr. Nevill explained that, following the data analysis, he prepares a written report consisting of the analysis of the data collected (tree species profile, size distribution, and other characteristics) on the trees in the City and breaks down the information. Then he analyzes the data and provides a report on what type of management needs are necessary. The cost for training includes a one-day session on how to use the software.

Mayor Pro Tempore Pennino indicated that he supports the data and computer programming; however, he strongly felt that it should include all public trees and that there be no separation between Parks and Recreation and the Street Division. He questioned why staff had not come forward with a proposal that included all City trees; otherwise, this is just an incomplete report and database.

Public Works Director Prima explained, with concurrence by Parks and Recreation Director Baltz, that both departments work closely together on City trees and rely on each other's expertise. The presentation by ACRT was given to both departments simultaneously; however, Parks and Recreation declined to participate at this time due to budgetary constraints. The cost to include Parks and Recreation would be an additional \$7,000-\$10,000. Mr. Baltz indicated that if the money were allocated, the department would like to participate.

Mayor Pro Tempore Pennino encouraged the City Manager's Office to find money in the budget to include the parks trees.

In response to Deputy City Manager Keeter's suggestion to handle the inventory in two phases using the same software, Mr. Nevill replied that this practice is quite common because of budget constraints. There would be no problem with inventorying the street trees during this fiscal year and the remaining parks trees during the next fiscal year.

Public Works Director Prima added that the software can be networked and connected with Parks and Recreation very easily, and it was fully expected that Parks and Recreation would come on-line at some point in the future.

Council Member Land concurred that Parks and Recreation trees should be included in the program, and further questioned why the City did not go through the bid process.

Deputy City Manager Keeter responded that staff conducted a brief review to see what else was available, and staff's recommendation two years ago was to contract with ACRT, which is still its recommendation. ACRT is a local firm and has a quality program.

Council Member Land questioned if the City has enough money set aside in the budget to handle the increased scheduling of maintenance. Deputy City Manager Keeter indicated that there are street maintenance funds available for some tree maintenance work, but not a significant amount.

Public Works Director Prima added that there is a separate tree maintenance account, which includes the landscaping maintenance. Currently there are no formal maintenance records, as most matters are handled verbally or via phone calls.

Street Superintendent George Bradley further added that the City currently has no inventory. The City plants approximately 250 trees a year and removes 30-100 trees, which does not include those associated with Capital projects. The software is very adaptable, and staff could easily add other trees to the program, like the parks trees, trees from parking lots, and any Heritage trees on private property.

In response to Council Member Land, Public Works Director Prima stated that staff is currently looking at a grant through Proposition 12 that provides an allowance for planting trees; however, there are no grants covering the inventorying and maintenance of trees.

In reply to Council Member Hitchcock, Mr. Nevill stated that ACRT has worked with the cities of Berkeley, Agoura Hills, Pasadena, and El Cajon, and the company has been in California for the last two years. Prior to this, ACRT has worked with over 200-300 cities in the eastern United States. Mr. Nevill indicated that ACRT has not integrated Heritage tree ordinances with any other California cities. If the City wanted to do this, it would first have to provide guidelines or a list of trees. Any trees meeting Heritage tree ordinance guidelines that are situated in the public right-of-way would already be included in the inventory; however, those located on private property would need additional costs for

permission to enter the property and collect the information. The software is flexible and, in anticipation of a Heritage tree inventory, could include a classification for Heritage trees and whether it stands on public or private property. Then next year if the program is in place, the City could decide to include this in its inventory and add it to the program very easily.

Mayor Pro Tempore Pennino asked staff to contact the above cities for references.

PUBLIC COMMENTS:

- Walter Pruss questioned what the plan is for planting trees or landscaping in the right-of-way along the soon-to-be completed Lower Sacramento Road street widening project.

Public Works Director Prima stated that there was a formal study done, and presentations were made at a number of public meetings. Mr. Prima indicated he would provide Mr. Pruss with information from the study.

Deputy City Manager Keeter confirmed that the maintenance management of public trees would come back before the City Council at the next Council meeting, and would include further information about the inclusion of parks trees in the program as well.

"Heritage" Tree Policy

Community Development Director Bartlam reminded Council that the Heritage tree policy, which deals specifically with trees on private property, was previously discussed by Council in 1991 when former City Attorney McNatt prepared the draft ordinance (filed). The ordinance was prepared in reaction to trees that were removed along Victor Road in conjunction with a street project. Currently, however, Public Works takes specific action with regard to the removal of trees associated with a street widening project.

The idea of a Heritage tree ordinance is new in Lodi, as well as in California. Oak trees are not the only protected species, however, they tend to be the ones looked on most favorably. Many of the significant oak trees (9" or more in diameter) have been removed because of farming practices, as much of the land has been converted to vineyards. Heritage trees, or trees of importance, are defined particularly by species, size, and age. For example, in the city of Rancho Cucamonga, eucalyptus trees are planted to block high winds, yet as the city developed and the encroachment on these trees became more prevalent, it became necessary to protect those trees, and they are now considered a Heritage tree. It is one of local choice as to what is important and what is not. How Heritage trees on private property are handled should be approached very carefully. Mr. Bartlam requested Council guidance, so that staff may return with a proposed ordinance reflective of Council's direction.

Mayor Nakanishi indicated that he received a call from a citizen who was concerned that the City was cutting down an oak tree. It turned out that the tree was not on public property. Mayor Nakanishi felt strongly against regulating trees on private property.

Council Member Land stated that he visited the subject property and spoke to the tree trimmers, who felt that, under the criteria of Stockton's tree ordinance, the tree should be removed. It created a lot of damage, and years ago it damaged a garage across the alley. The tree trimmers indicated that parts of the tree were diseased. Mr. Land agreed with the Mayor's statement that the City not regulate trees on private property and referred to the draft ordinance that made it a misdemeanor, along with a fine of \$1,000, should anyone violate the chapter. If a property owner purchased a new property and cut down a Heritage tree, he could go to prison – this ordinance takes away property owners' rights.

Council Member Hitchcock stated that she is in favor of a Heritage tree ordinance. Protection should be given to 200-300 year old oak trees that are of historical significance, especially those on land that has not yet developed. Instead of removing trees as part of a development project, developers should plan the project around the trees. Trees belong to more than just the property owners, and the City should weigh the

common good of everyone and move forward on a Heritage tree ordinance. Ms. Hitchcock clarified that she is not advocating the retention of trees that are diseased or are a safety concern.

Council Member Howard felt that trees on private property should be dealt with on a case-by-case basis and not by a City ordinance, which takes away property owners' rights and privileges. As far as preserving trees, she felt many would be preserved by other means, such as the City's tree management plan and on an individual basis where people and developers will be more creative in designing projects around existing trees.

Mayor Pro Tempore Pennino concurred with previous comments regarding private property rights, and stated that Public Works is doing a good job in notifying Council of any trees scheduled for, or in need of, removal.

COMMENTS BY THE COUNCIL ON NON-AGENDA ITEMS:

- Council Member Land announced that the non-profit organization, Lodi House, will host its annual benefit, "Harvest in the Grove," on Sunday, October 14 from 3:00-6:00 p.m. The one-year-old Lodi House successfully assisted 19 women and 60 children in breaking the cycle of homelessness. Tickets are \$25 each, and 100% of the proceeds go toward Lodi House and helping women and children.

Council Member Land apologized for not attending the last Council meeting, but he had previously committed to attend the California Bankers' Association conference, at which it presented nine community development programs, three of which were from Lodi (Lodi House, the RENEW project, and the first-time homebuyer program grant).

Mr. Land noted that he had an opportunity to view the replay of the Council meeting on Friday night. He suggested bringing in a professional, perhaps from the League of California Cities, to work with Council in making its meetings more effective and efficient. He would be willing to use his travel expense budget to help offset the cost of any training. He asked for Council concurrence to bring this matter back to Council at a regular Council meeting.

- Mayor Nakanishi stated he would take this under advisement; whereas, Mayor Pro Tempore Pennino felt this was not a public issue.
- Council Member Hitchcock explained that there was a lengthy agenda at the last meeting. In addition, many items were inappropriately placed on the consent calendar and were removed for further discussion under the regular calendar. She felt Council did a good job at the meeting. She was not in favor of expending funds for the type of training suggested by Council Member Land; however, if the League were willing to talk with Council for free, she would certainly participate. She added that Council should not feel pressured to complete its business in order to meet the newspapers' deadlines.
- Mayor Nakanishi stated that he prefers to be lenient with the public and listen to what they have to say. The comment in the Lodi News-Sentinel about not following the publicized time limit is untrue, as the City Clerk has been using a timer for public comments.

D. COMMENTS BY THE PUBLIC ON NON-AGENDA ITEMS

None.

E. ADJOURNMENT

No action was taken by the City Council. The meeting was adjourned at 8:16 a.m.

ATTEST:

Jennifer M. Perrin
Deputy City Clerk

Mayor's & Council Member's Weekly Calendar

WEEK OF OCTOBER 9, 2001

Tuesday, October 9, 2001

- 7:00 a.m. Shirtsleeve Session
1. Urban Forest Issues - Maintenance Management of Public Trees and "Heritage" Tree Policy (PW)
- 5:00 p.m. Land and Pennino. 2 x 2 meeting with LUSD, @ LUSD offices.
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Wednesday, October 10, 2001

8:30 - 3:00 p.m. Electric Utility's 6th Annual Public Power Week Open House, @ EUD.

Thursday, October 11, 2001

5:30 - 7:30 p.m. San Joaquin County WorkNet Grand Opening and Ribbon Cutting, 850 N. Hunter, Stockton.

Friday, October 12, 2001

Saturday, October 13, 2001

Reminder Annual Salmon Festival, Lodi Lake, October 13 - 14.

10:00 a.m. Special Olympics "Walk for the Gold," Lodi Lake Wilderness Area.

Sunday, October 14, 2001

2:00 - 5:00 p.m. Land. Prayerfest, under the Pine Street Arch.

3:00 - 6:00 p.m. Lodi House's "Harvest in the Grove," Jesse's Grove Winery, 1973 W. Turner Road.

Monday, October 15, 2001



CITY OF LODI

SHIRTSLEEVE SESSION

AGENDA TITLE: Urban Forest Issues – Maintenance Management of Public Trees and “Heritage” Tree Policy

MEETING DATE: October 9, 2001

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council indicate what additional information is necessary or otherwise give direction to staff on these issues.

BACKGROUND INFORMATION: **A) Management Program** The City of Lodi Public Works Department Street Division manages the City’s trees located in the public right-of-way and at City facilities (except parks). A modern, computerized tree inventory and management system would enable our Tree Operations supervisor to more effectively manage our approximately 8,000 trees. Implementation of a computerized inventory and management system was approved in the 1999/00 budget at \$31,000, but was delayed, and costs have increased.

ACRT was selected to assist in the effort (Exhibit A). They are a leader in this field and have offices in Lodi. ACRT will evaluate all street trees for size, health, and value. This evaluation would facilitate management of existing trees through tracking, scheduling, and documentation of maintenance. ACRT is going to survey the trees with International Society of Arborists (ISA)-certified arborists. This will provide the City with a very accurate assessment of our urban forest and its immediate and long-range needs. Additionally, this program will be used for planning replacement of problematic trees, planning for future improvements, minimizing the spread of potential disease and insect infestations, budget analysis and forecasts.

A properly managed urban forest is a valuable asset to our community, including providing aesthetic appeal, psychological uplift, historical value, oxygen generation, climate control (absorbing incident solar radiation, cooling through evapotranspiration, blocking radiant heat loss from homes, deflecting winds), minimizing air pollution by removing both solid and gaseous particles, reduction in noise pollution, and enhanced property values. The requested appropriation allows for software, training, and inventory work. An allowance was made for identification of potential tree-planting sites, thus the exact cost is unknown. Once implemented, the program will be available to the Parks Division to evaluate and manage park trees. Approval to purchase the services and software shown below is proposed for the October 17, 2001 Council agenda.

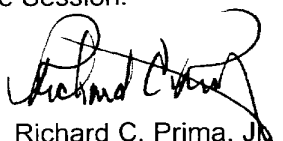
FUNDING:	Appropriation:	Street Fund	\$44,000
	Estimated Cost:	Inventory (approx. 8,000 trees at \$3.60 each)	\$28,800
		Management Plan	3,500
		Software	5,973
		Training	2,300
		Contingencies (additional trees, sites, misc.)	<u>3,427</u>
			\$44,000
	Budgeted:	1999/01 fiscal year (Page E-8, Capital Improvement Budget)	

APPROVED: _____
H. Dixon Flynn -- City Manager


B) Heritage Trees The tree management program as presently proposed only applies to trees within the public right-of-way. The program will eventually include policies and procedures as to how the City will maintain its urban forest. These concepts will also eventually apply to trees in parks. And, they could also include specific consideration for “heritage” trees however they may be defined. Finally, such consideration could also be given to privately owned and maintained trees.

In 1991, the City Council considered a proposed heritage tree ordinance. A copy of the draft and report to the Council by then City Attorney, Bob McNatt, is attached (Exhibit B). For various reasons, including reluctance to regulate privately-owned trees, the ordinance was not adopted.

Staff is prepared to review the draft and discuss various issues related to a heritage tree program at the Shirtsleeve Session.



Richard C. Prima, Jr.
Public Works Director



Rad Bartlam
Community Development Director

RCP/lm

Attachments

cc: George Bradley, Street Superintendent
Ray Fye, Tree Operations Supervisor
ACRT, Inc.

Tree Inventory, Management Plan & Other Services for the City of Lodi, CA



August 22, 2001

ACRT, Inc.
730 South Beckman Road
P.O. Box 1540
Lodi, CA 95241-1540

Phone: 877-227-8978
Fax: 209-367-4196
rnevill@acrtinc.com



COST PROPOSAL

Task 1: Tree Inventory

- Tree Inventory using Tree Manager™ for Windows® Software \$3.10/tree*
- with GPS \pm 3 ft \$3.60/tree*

³ Task 2: Tree Management Plan

Includes separate plans for streets and parks \$3,500.00

² Task 3: Tree Manager™ for Windows® Software \$5,973.00

Options:

On site training (8 hours), installation and 5 copies of manual \$2,300.00

~~Annual Technical Support (includes upgrades) \$4,800.00~~

~~or technical support may be purchased hourly at \$ 89.00/hour~~

} will evaluate
in FY 01/02
Budget

~~Task 4: Contract Forester~~

~~Contract Foresters hourly at \$ 59.00/hour*~~

~~Task 5: Computer Hardware~~

- ~~• Fujitsu 3400 Stylistic Handheld \$4,500 to \$5,125.00
(depending on options)~~

* A 20% discount has been applied to each of the Tasks noted.

Prices are effective until December 31, 2000.

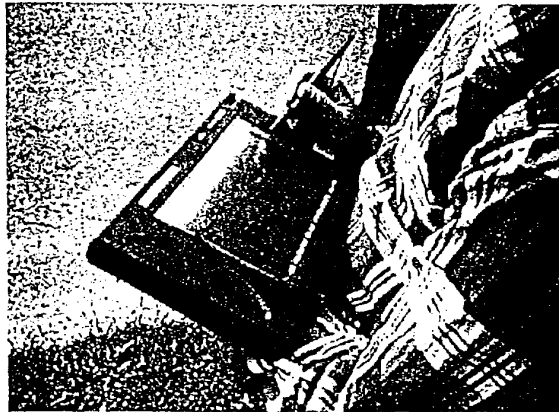
TASK 1: TREE INVENTORY

A. Data Collection Specifications

ACRT will inventory all trees and planting sites on the boulevards and parks in the City of Lodi. Wooded areas will be inventoried specifically for hazard trees or if there is a situation that demands clearance trimming, only at the request of City of Lodi staff.

The inventory will include the following types of information:

- Location
- Tree Identification
- Planting Site Identification
- Size Classification
- Condition Rating
- Maintenance Needs
- Clearance Trim
- Utilities



- Special Work Considerations

B. Data Collection Methodology and Inventory Integrity

ACRT will collect data on hand-held computers using Tree Manager for Windows software. The data can then be electronically transferred to ACRT's computers for processing. This procedure eliminates the need to keypunch data from handwritten field notes and has proven to be a rapid, reliable means of data collection.

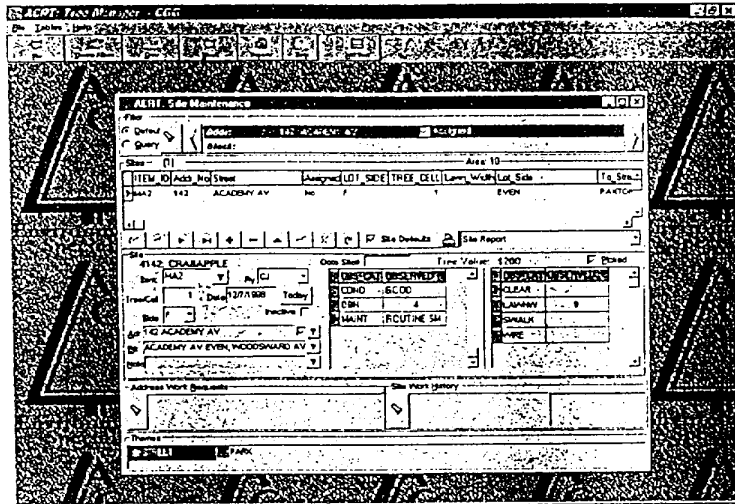
- ACRT collects your data using hand-held microcomputers
- A complete list of street and park names are pre-loaded onto the computer
- Quality control checks for tree identification are built into the hand-held computer program
- The date and the data collector's initials are automatically recorded on the computers
- All inventories are backed up daily to ACRT Western Division's main computer



- ACRT conducts a 10 percent quality control check at the start of an inventory
- ACRT uses well trained and experienced personnel to collect the data

TASK 2: TREE MANAGER™ FOR WINDOWS® SOFTWARE

Tree Manager™ for Windows® is an urban forestry management program that allows you to electronically maintain information about your urban forest, including work performed on trees, requests for service, and to perform daily forestry operations.



A. Standard Primary Functions of Tree Manager

- Displays all pertinent information regarding one tree (tree/site information, work history information, and service request information)
- Maintains information on removed trees for liability purposes, population analysis, and species costing
- Allows the user to enter a virtually unlimited number of work history entries per tree
- Stores comments for any tree, work history, or service requests
- Calculates total tree values
- Can automatically calculate cost information for crews, equipment, and materials
- an extensive user friendly on-line help system
- Permits electronic data entry from some hand-held computers
- Has option to download to computer for field inspections and upload from hand-held to PC to update (add, delete, or change) information in the PC's master data files
- Work history windows allow users to input labor rates and equipment costs
- Tree Manager for Windows® includes

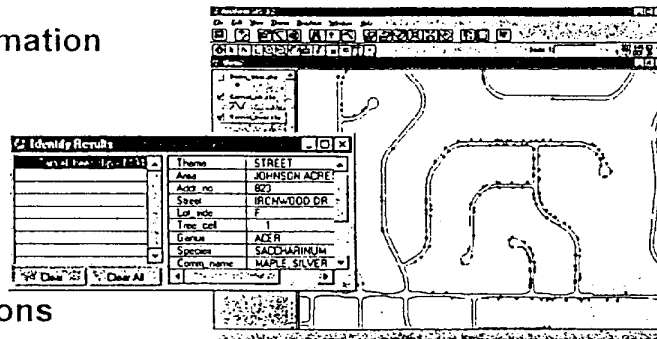
B. Minimum System Requirements

- Intel Pentium 200 MHz processor
- 32 megabytes of RAM
- 800 megabytes of free disk space,
- Windows® 95/98/NT/2000

For optimal performance, ACRT recommends a Pentium 500 MHz or faster, 2-gig free disk space or more, 256 megabytes of RAM, Windows® 98/2000, and a 4 megabyte graphics accelerator card.

C. Interface to Geographical Information Systems

Tree Manager software can be used to interface to the City's Geographical Information Systems (GIS) such as ArcView®, Intergraph®, or MapInfo®.



D. Tree Manager Terms & Conditions

All clients are required to sign an agreement (Attachment). This agreement specifies that the software may be used by the City and cannot be sold or given to other entities.

E. Installation and Training

ACRT believes that training, continuing support and development are integral parts of any tree inventory package. ACRT can provide one to two day workshops for Tree Manager and/or ArcView®. The training shall ensure competent, comfortable use of the software by staff. (Please call for pricing.)

F. Tree Manager Software Support

Included in the Tree Manager software package is 60 days of post-installation telephone support (not to exceed 10 hours) to answer questions and aid managers in the use of the software system. Support will also include on-line support via computer modem when necessary if the client system is properly equipped.

TASK 3: TREE MANAGEMENT PLAN

ACRT will prepare an Inventory Data Analysis and three different proposals for a Tree Management Plan for review by City of Lodi staff. The plan would include:

- The Goals of the Management Plan
- Survey Results
- Hazard Tree/ Safety Pruning Mitigation Plan
- Routine Maintenance and Planting Recommendations
- Tables and charts of tree species profiles for your City.
- An estimated annual cost to maintain the trees in your City.

The management plan will be based on the results of the inventory and on observations made while performing the data collection. Data collection procedures and approaches to the study will be described in detail.

The analysis will include presentations of tree species population density and diversity along with physical characteristics of the tree population (diameter, maintenance, etc.) Specific results of the inventory will be included in graphs, and summary tables within the report. The analysis of the results will be used to predict future trends for the City of Lodi's urban forest. The report will also provide an estimated dollar value of City trees to indicate the monetary benefit of the urban forest.

Tree and planting site data will be analyzed using computer summaries of species composition, size distribution, maintenance needs, and location. Relationships between these various parameters will be discussed in terms of management strategy and long term planning. Discussion of the results will include identifying trends, potential problems, favorable conditions, and recommendations to reduce future maintenance costs.

A five-year general vegetation maintenance program for each proposal will be presented to set priorities to the types of maintenance tasks to be accomplished. This replacement and removal program will be based upon the survey. This will include tasks to be completed, the quantity of vegetation requiring maintenance, the estimated person-hours, budgets, and the time of year when these tasks should be completed. Computer listings necessary for completing priority work will be included. ACRT will include a list of recommended tree species for planting in the City of Lodi.

ACRT, Inc., (Appraisal, Consulting, Research, and Training) is an international consulting service and training organization in the utility and urban forestry, arboricultural, environmental, natural resource, biological, and horticultural sciences. In 1978, Richard E. Abbott, ACRT's chairman and CEO, started the first national, commercial, urban forestry consulting firm in North America and, possibly, the world.

Since 1985, ACRT's Utility Services Group has provided contract foresters, tree and brush control operations preplanners and R/W maintenance inspectors to more than 100 electric utilities nationwide. Among the services are: prenotification/ permitting of tree owners for trimming and/or removal; line clearance work planning and scheduling; tree crew inspections and evaluations, and right-of-way management.

ACRT developed Utility Tree Manager™ for Windows® software for distribution and transmission management information systems. Also mapping of trees, poles or electric hardware using Global Positioning Systems (GPS) on distribution and transmission and integration with Utility Tree Manager.

ACRT is a leader in Tree Growth Regulator (TGR) application and research.

ACRT's Offices



Cuyahoga Falls, Ohio



Lodi, California

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CITY COUNCIL SHIRTSLEEVE SESSION COMMUNICATION

DATE OF SHIRTSLEEVE SESSION: FEBRUARY 12, 1991

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To: Honorable Mayor and Council Members

From: Bob McNatt, City Attorney

Date: February 6, 1991

Subj: DRAFT HERITAGE TREE ORDINANCE

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As directed by the Council, the attached ordinance has been prepared to deal with the preservation of certain trees within the City. This was done in response to concerns expressed by citizens over the removal of certain mature trees during right-of-way construction along Victor Road.

Heritage tree ordinances from several jurisdictions around California were examined before this draft was prepared. This ordinance is intended to incorporate the best features of several of these, modified appropriately to meet local needs.

The attached draft actually addresses 3 different classifications of trees:

- ° First, all mature live oaks, valley oaks and scrub oaks in the City are included. It may be necessary to include other species if found locally.
- ° Second, all trees having some historical significance, as declared by resolution of the Council, would be protected, although this would require some initial inventory of "heritage trees".
- ° Third, all mature trees of any species, whether or not a heritage or oak tree, having a diameter of 9" or more as measured 4-1/2 feet above the ground would be subject to the ordinance, but only if those trees in this general category were located on land proposed for some sort of "urban development". Conversely, the "heritage" trees and mature native oak trees and mature oak trees would be subject to the ordinance, even if no development was proposed.

A presumption was made that the Public Works Department or Community Development Department would be responsible for implementing the ordinance. That decision is up to the Council. In any event, it will require a substantial commitment of staff time to implement the ordinance if adopted.

Shirtsleeve Session of February 12, 1991
Heritage Tree Draft Ordinance
Page Two

If any person proposed a development which included the cutting down of subject trees, certain decisions would be made by the responsible department head or designee. A list of criteria upon which the decision would be based is included in the ordinance, and includes such things as the general health of the tree, the economic impact on the property, and the proposed or existing placement of other buildings, utilities, etc.

Applicants would be required, prior to beginning work, to submit a plan to the City showing heritage trees which might be affected and describing how these trees would be protected during construction. I am informed that this is desirable due to the fact that oak trees may be particularly susceptible to root damage within or near their "drip zone" due to construction or other activities.

If it was deemed appropriate to issue a permit for removal, the party requesting the permit would be required to replace the tree with new trees based on one of three formula specified in the ordinance. This was done to assure that the aesthetic quality of the City was maintained. Admittedly, this ordinance would not protect mature trees which were not oaks or otherwise deemed "heritage trees" from being removed prior to the time City approval of a project was sought. That seems to be a commonly found aspect of heritage tree ordinances around the State. This is probably based upon economic considerations of property development.

The ordinance also provides for an appeal procedure from the department head to the Planning Commission and ultimately to the City Council if necessary. The procedures used would be similar to those already in place for appeal of other zoning decisions.

Violation of the ordinance would be a misdemeanor. Each tree removed or destroyed in violation of the ordinance could constitute a separate offense.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "BW McNatt", with a long horizontal flourish extending to the right.

Bob McNatt
City Attorney

BM:vc

TREES/TXTA.01V

AN ORDINANCE OF THE LODI CITY COUNCIL
AMENDING THE LODI MUNICIPAL CODE BY ADDING THERETO
A NEW CHAPTER 17.80 RELATING TO THE PROTECTION AND PRESERVATION OF
NATIVE OAK TREES, HERITAGE TREES, AND MATURE TREES

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BE IT ORDAINED BY THE LODI CITY COUNCIL AS FOLLOWS:

SECTION 1. Chapter 17.80 is hereby added to Title 17 of the Lodi
Municipal Code to read as follows:

Chapter 17.80

Tree Protection and Preservation.

17.80.010. Legislative intent.

The purpose of this ordinance shall be, to the greatest extent possible, to protect and preserve native oak trees, heritage trees, and mature trees, especially where such mature trees are associated with proposals for urban development, in order to protect the health, safety, and welfare of the citizens of Lodi.

17.80.020. Scope.

The provisions of this chapter shall apply to all native oak trees, heritage trees, and other mature trees, where such mature trees are associated with proposals for urban development, on all public and private property within the City of Lodi, except as set forth herein.

17.80.030. Definitions.

For purposes of this chapter, unless otherwise apparent from the context, certain words and phrases used in this chapter are defined as follows:

(a) "Director" shall mean the City of Lodi (? Public Works Director/Community Development Director).

(b) "Heritage tree" shall mean a living tree designated by resolution of the Council as a heritage tree because of an association with some event or person of historical significance to the community or because of special recognition due to size, condition, or aesthetic qualities.

(c) "Lot" shall mean an area of land created or established for the purposes of sale, lease, financing, division of interest, or separate use, separated from other lands by description on a subdivision map or parcel map.

(d) "Mature tree" shall mean a living tree with a diameter of nine inches (9") or more as measured four and one-half feet (4-1/2') above the root crown.

(e) "Native oak tree" shall mean a living tree of the genus *Quercus* and species *lobata* (valley oak), *agrifolia* (live oak), or *dumosa* (California scrub oak), or hybrids thereof.

(f) "Associated with a proposal for urban development" shall mean any land area for which an application for a specific plan, planned development permit, or major modification thereof, variance, subdivision, or a time extension thereof, or special or conditional use permit has been filed with and is pending consideration by the City or has been approved but the related project or applicable phase thereof has not yet been completed.

17.80.040. Prohibition of removal.

No native oak tree, heritage tree, nor any other mature tree, where such mature tree is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, except as provided for in this chapter.

17.80.050. Permits.

(a) No native oak tree, heritage tree, nor any other mature tree where such mature tree is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the Director or the Director's designee. The Director or designee shall establish the format and the information required for a tree removal permit consistent with this chapter.

(b) Prior to issuance of such permit, the Director or Director's designee shall inspect the premises involved and designate the trees to be removed or moved.

(c) No tree removal permit shall be issued for the removal of any tree on any lot associated with a proposal for urban development, unless the project has been approved by the City or unless the Director or the Director's designee determines that the immediate removal of the tree is required because of any condition of the tree with respect to disease, danger of collapse of all or any portion of the tree, proximity to an existing structure, interference with utility services, or street alignments.

(d) Where trees are proposed for removal which are not associated with a proposal for urban development, the Director or

Director's designee may condition a tree removal permit upon the replacement of certain trees. Any applicant for a tree removal permit shall not be required to expend more on the replacement trees than the appraised value of the trees for which a permit is required.

(e) Where trees are proposed for removal which are associated with a proposal for urban development, the Director or Director's designee shall cause an appraisal of the value of such trees to be prepared. The resulting value shall be applied to upgrading the size of tree plantings associated with the project.

(f) In no case shall an applicant for a tree removal permit be required to replace or otherwise pay for the value of any tree which the City has directed the applicant to remove so that a public street may be constructed along an alignment determined by the City.

(g) It shall be the duty of the applicant for any urban development permits or approvals to submit to the City prior to development approval, a plan showing any Heritage trees on the parcel, lot or adjacent right of way, and containing a description of necessary steps to be taken in order to protect such Heritage trees during construction.

17.80.060. Standards for granting or denying tree removal permits.

The determination of the Director or the Director's designee, shall be based upon the following criteria:

(1) The condition of the tree with respect to disease, danger of collapse of all or any portion of the tree, proximity to an existing structure, or interference with utility services;

(2) The necessity to remove a mature tree in order to construct improvements which allow economic enjoyment of the property;

(3) The number of mature trees existing in the neighborhood;

(4) Good forestry practices, including, but not limited to the number of healthy mature trees a given parcel of land will support;

(5) Whether or not the removal of the tree is necessary to construct required improvements within the public right-of-way or within a flood control or utility right-of-way; and

(6) The suitability of the tree species for use in an urban area.

The Director or the Director's designee shall give priority to the inspection of those requests based upon hazardous conditions. The Director or designee may refer any request to the Planning Commission for a determination.

17.80.070. Exceptions.

The following shall be exempt from the provisions of this chapter:

(a) Projects with development permits approved prior to _____. Where tree removal has been specified under the approval of the development permit, no other permit shall be required.

(b) Cases of emergency where the Director or the Director's designee or any member of a law enforcement agency, City Fire Department or Parks and Recreation Department, in the performance of his or her duties, determines that a tree poses an imminent threat to the public safety or general welfare.

(c) The removal or relocation of trees necessary to obtain adequate line-of-sight distances as required by the City Engineer;

(d) The removal of street trees from within the public right-of-way which, in the opinion of the Director or Director's designee, will cause damage to existing public improvements;

(e) Actions taken for the protection of existing electrical power or communication lines or other property of a public utility;

(f) Trees planted, grown, and/or held for sale by licensed nurseries or the removal or transplanting of such trees pursuant to, and as a part of, the operation of a licensed nursery business;

(g) The removal of trees on any property owned by the County of San Joaquin, State of California, or any political subdivision thereof;

(h) This section shall not preclude pruning or trimming which does not endanger the life or aesthetic value of the tree.

17.80.080. Procedures for establishing value of trees.

The Director or Director's designee may condition a tree removal permit for the replacement of certain trees. The replacement value shall be established using the following procedure:

(a) The replacement value shall be based upon the most recent edition of the "Guide for Establishing Values of Trees and Other Plants", prepared by the Council of Tree Landscape Appraisers;

(b) If mutually agreed upon by the applicant for the tree removal permit and the City, the Director or Director's designee may prepare an estimate of the value of the certain trees; and/or

(c) The applicant for a tree removal permit may submit an appraisal prepared by an horticulturist, arborist, or licensed landscape architect.

17.80.090. Appeals.

Decisions of the Director or the Director's designee may be appealed to the Planning Commission. .Decisions of the Planning Commission may be appealed to the Council, utilizing procedures used in other types of zoning regulation appeals, as described in Chapter 17.72 of this Code.

17.80.100. Severability.

If any section, subsection, clause, or phrase of this chapter is for any reason held to be unconstitutional or otherwise invalid, such decision shall not affect the validity of the remaining sections of this chapter. The Council hereby declares that it would have adopted this chapter, and each section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more other sections, subsections, sentences, clauses, or phrases be declared unconstitutional.

17.80.110. Violations: Penalties.

A violation of the prohibitions of this chapter or any condition of a tree removal permit granted pursuant to this chapter shall be a misdemeanor, punishable by a fine of not more than \$1,000, or by imprisonment not to exceed six (6) months, or by both such fine and imprisonment. For purposes of enforcement, the destruction, cutting down, or removal of each tree which is done in violation of this chapter, shall constitute a separate offense.

SECTION 2. All ordinances and parts of ordinances in conflict herewith are repealed insofar as such conflict may exist.

SECTION 3. This ordinance shall be published one time in the "Lodi News Sentinel", a daily newspaper of general circulation printed and published in the City of Lodi and shall be in force and take effect thirty days from and after its passage and approval.

Approved this day of

DAVID M. HINCHMAN
Mayor

Attest:

ALICE M. REIMCHE
City Clerk

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State of California
County of San Joaquin, ss.

I, Alice M. Reimche, City Clerk of the City of Lodi, do hereby certify that Ordinance No. _____ was introduced at a regular meeting of the City Council of the City of Lodi held _____, 1990 and was thereafter passed, adopted and ordered to print at a regular meeting of said Council held _____, 1990 by the following vote:

Ayes: Council Members -

Noes: Council Members -

Absent: Council Members -

Abstain: Council Members -

I further certify that Ordinance No. ____ was approved and signed by the Mayor on the date of its passage and the same has been published pursuant to law.

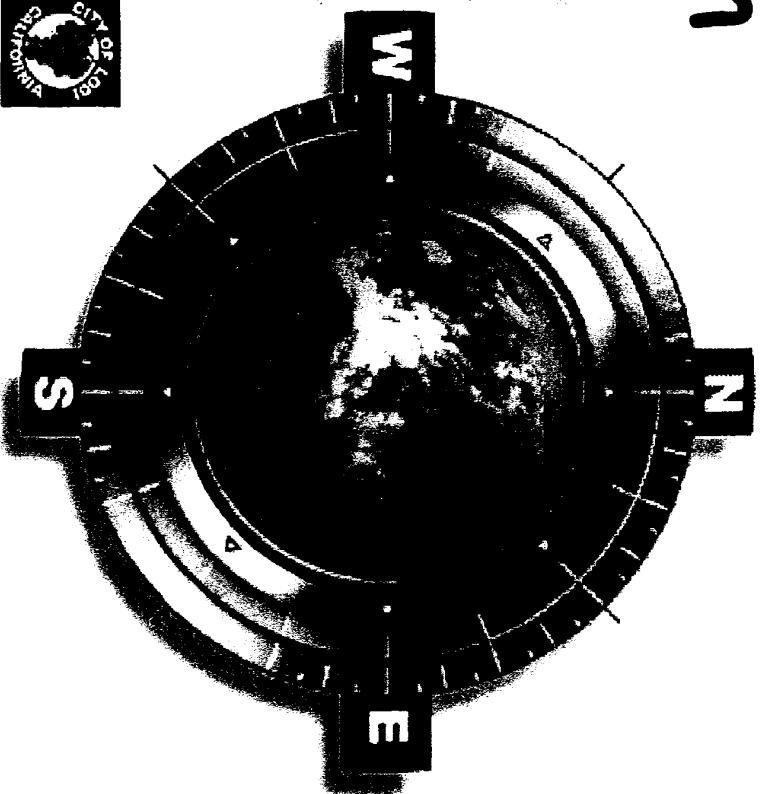
ALICE M. REIMCHE
City Clerk

Approved as to Form

BOBBY W. McNATT
City Attorney

ORDTREE/TXTA.01V

Implementation of an Urban Forest Management Plan for the City of Lodi



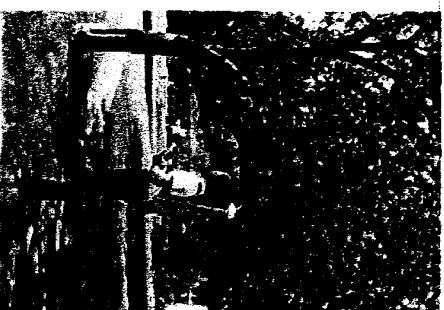
Presented by

ACRT, Inc.

P.O. Box 1540

Lodi, CA

Dr. Ralph Nevill
(209) 367-4196



Urban Forest Management Plan

- An Urban Forest Management Plan is a comprehensive master plan that leads to a healthier, more efficiently maintained urban forest.
- The management plan is based on tree inventory data,
- It provides detailed tree information, and yearly maintenance and long-term management recommendations
- -- including tree species profiles, species selection criteria, planting program development and tree protection, and future trends for the urban forest
- Communicates the importance of the urban forest to key decision-makers and the public.

Four Reasons for a Management Plan

1. Resource

- No. of trees,
- tree location,
- tree condition, etc.,

2. Safety

- Annual safety inspection
- Hazard trees
- Safety pruning

3. Management

- Routine Maintenance
- Service Requests
- Other City Departments

4. Planning

- Future Development
- Tree Replacement
- Budgets



Components of a Management Plan

- Tree inventory
- Tree inventory software
- Data analysis of inventory results
- Tree species profiles
- Planting and maintenance recommendations
- Tree protection, and future trends for the urban forest

Urban Forest Management Plan

Tree Inventory: a survey of a city's trees and forests to determine:

- Numbers
- Location: address and/or mapped location (GIS - ArcView)
- Type of planting: street, median, parking lot, public land, park, etc.
- Street type: major, minor, residential, scenic

Urban Forest Management Plan

Tree Inventory (cont'd):

- species
- age
- size (DBH, height, canopy spread, etc.)
- condition - health
- condition - structural (risk) assessment
- site conditions (dimensions of planting strip, pit, median, turf)

Urban Forest Management Plan

Tree Inventory (cont'd):

- Constraints (street lights, overhead utility lines, traffic signs, commercial signage, etc.),
- Infrastructure damage rating,
- Other: nuisance, pest problems, allergy potential, historic or cultural significance, heritage or protected status.

Urban Forest Management Plan

Provide a proactive management tool that:

- Assesses present condition of the urban forest
- Provide cost projections
- Assist with the budget process
- Anticipates future changes and needs
- Monitors change over time
- Provide a basis for establishing the value of the urban forest

Urban Forest Management Plan

Provide a master plan to:

- Schedule work
- Track work completed
- Prioritize removals, tree planting and other maintenance
- Detect hazards
- Provide information about age and species distribution
- Manage liability (trip and fall, property damage, personal injury more effectively)

Tree Inventory

- Most tree inventories consist of two parts:
 1. Tree Location &
 2. Tree Attribute information
- GPS is used to map the location of the Trees,
- We use Tree Manager for Windows to collect your tree information
- Data is kept compatible with Your existing Maps and Data Systems

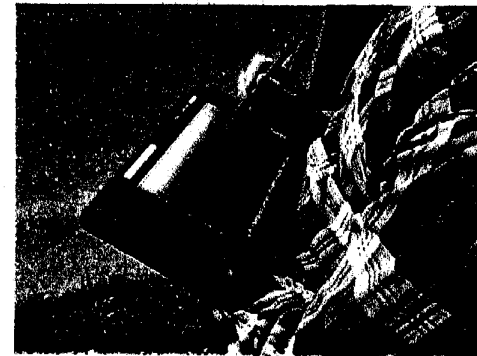
Why GIS & GPS?

Maps & databases make managing the tree inventory easier:

- Mapping trees allows for quick visual surveys
- Databases allow for searches on tree attributes.
- Locating a tree in the field is easier when a map is provided
- Maps are powerful tools to illustrate needs & situations
- Provide visual data for budget & grant requests

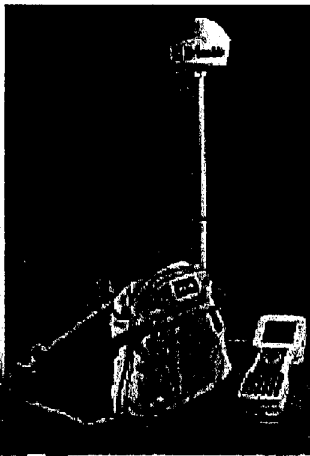
How Does ACRT Collect Tree Data?

- We use graduate, ISA Certified Arborists to collect your data
- Tree data is collected on hand-held pen-based computers using Windows 98® and Tree Manager™ for Windows®
- The pen-based computers ~~allow~~ allow the foresters to collect & manage data in the field,
- Because your data is collected in a Windows environment, there is no need for data conversion or additional software



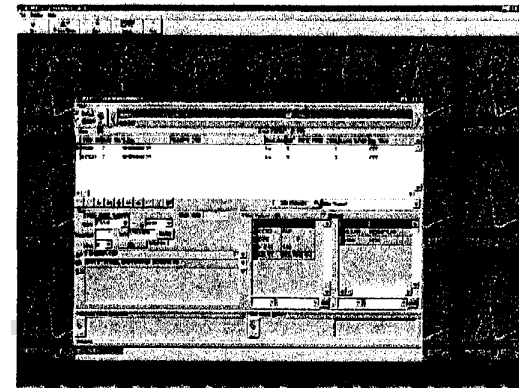
How do we gather GPS data?

■ Our foresters use special GPS receiving devices made by Trimble Navigation



Tree Manager for Windows Software

- Organizes your tree inventory data
 - Uses Windows point-and-click interface
 - Allows a view of the entire urban forest for tree-by-tree detail
 - Tracks tree maintenance activities and other costs
 - Integrates GIS mapping capabilities
- Produces reports based on Work History, Service Request, Species, and more



Summary

- We Understand Urban Forest Management Plans
- We Understand Tree Inventory Data Collection
- We Understand GPS Data Collection
- We Have the Technical Skills
- We Manage for Success
- ACRT's Philosophy Assures Client Satisfaction
- ACRT, Inc. Wants to be Your Partner

Questions ?

